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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,081	06/23/2004	Bong Su Um	122991-0018	5870
23429 7590 03/02/2010 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER KISWANTO, NICHOLAS				
ART UNIT 3664		PAPER NUMBER		
MAIL DATE 03/02/2010		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,081

Applicant(s)

UM ET AL.

Examiner

NICHOLAS KISWANTO

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed invention is a precalculation of deviation-expected points, including points of non-intersections. Applicant's specification does not indicate why or how one would precalculate at a non-intersection since a vehicle would not be required to follow a guidance at such a location, and thus be in no danger of deviating from the guidance path. In addition, the mere mentioning of having a point of non-intersection without any specific description renders the claim non-enable because one of ordinary skill in the art would not be able to make and use the invention without undue experimentation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103 (a) as being anticipated by Ito et al. (6,249,740).

As to claim 1, Ito shows a navigation system that has a transceiver 108, a display unit 106, an input unit 105, and an ECU 101. Ito's system requests an optimum path or shortcut path data (col 11, line 38 – 41) over a wireless network (Fig. 1). Said path data includes deviation-expected paths (col 22, line 20 – 28) calculated from one or more deviation points (col 25, line 3 – 5) between the departure point and the destination. Ito shows that the deviation-expected paths are precalculated and stored in memory before the mobile object deviates from the navigation path, and selecting revised path data which represent the revised navigation path, among the one or more precalculated deviation-expected paths stored in the memory to thereby provide the revised navigation path to the display unit after a present position of the mobile object deviates from the navigation path (*column 21, line 53 to column 22, line 49 describes the "Second Modification" to the specified invention, namely the process of precalculating deviation expected paths and storing said paths in memory before the mobile object deviates from the path and providing the updated path after the mobile object deviates so that said object can still arrive at the destination. Column 22, line 10-11 state that the process for this Second Modification may be carried out between Steps S61 and S62 of the flow chart in Figure 12. Column 20, lines 25-31 state that the flow*

chart in Figure 12 corresponds to step S6 in the flow chart of Figure 3. As can be seen in Figure 3, the entirety of the process, which includes calculating and storing the initial short-cut path and all the deviation-expected paths, takes place before the mobile objects departs).

However, Ito is silent as to the specifics of precalculating deviation expected paths at non-intersections.

Nevertheless, it would have been obvious to one of ordinary skill in the art that Ito can precalculate deviation expected paths at non-intersections, that are not straightaways, such as entrances into parking lots.

As to claim 2, Ito further shows a device for measuring the current position of the vehicle 104.

As to claim 3, Ito further shows both a video display 106, and a voice output unit 107.

As to claim 4, Ito further shows the ECU determining whether any of the deviation expected paths includes the current position (col 25, line 52 – 55).

As to claim 5, Ito further shows a memory 103 that stores all data and can transmit to any component of the system.

As to claim 7, Ito further shows a method for navigating a mobile object (col 2, line 63) traveling from a departure point and destination (col 11, line 40 – 41), comprising the steps of transmitting a signal 108 requesting a path data from departure point to destination, receiving path data via a wireless network (Fig. 1), displaying 106 navigation path from path data, precalculating deviation expected path data (col 22, line 20 – 28), selecting revised path data among deviation expected path data in case mobile object deviates from navigation path (col 22, line 16 – 22), and displaying revised navigation path (col 22, line 3).

Ito shows that the deviation-expected paths are precalculated and stored in memory before the mobile object deviates from the navigation path, and selecting revised path data which represent the revised navigation path, among the one or more precalculated deviation-expected paths stored in the memory to thereby provide the revised navigation path to the display unit after a present position of the mobile object deviates from the navigation path (*column 21, line 53 to column 22, line 49 describes the "Second Modification" to the specified invention, namely the process of precalculating deviation expected paths and storing said paths in memory before the mobile object deviates from the path and providing the updated path after the mobile object deviates so that said object can still arrive at the destination. Column 22, line 10-11 state that the process for this Second Modification may be carried out between Steps S61 and S62 of the flow chart in Figure 12. Column 20, lines 25-31 state that the flow chart in Figure 12 corresponds to step S6 in the flow chart of Figure 3. As can be seen in Figure*

3, the entirety of the process, which includes calculating and storing the initial short-cut path and all the deviation-expected paths, takes place before the mobile objects departs).

However, Ito is silent as to the specifics of precalculating deviation expected paths at non-intersections.

Nevertheless, it would have been obvious to one of ordinary skill in the art that Ito can precalculate deviation expected paths at non-intersections, that are not straightaways, such as entrances into parking lots.

As to claim 8, Ito further shows detecting the present position of the mobile object 104.

As to claim 9, Ito further shows that both navigation path and revised path can be outputted in either audio 107, or video 106.

As to claim 10, Ito further shows that the revised path is selected by determining which of the deviation path includes the present position (col 25, line 52 – 55).

As to claim 11, Ito further shows that all path data is stored in a memory 103.

Response to Arguments

5. Applicant's arguments filed 12/4/2009 have been fully considered but they are not persuasive. As to Applicant's argument that Ito does not precalculate deviation expected points at non-intersections, as described above, while Ito does not precalculate at straightaways, non-intersections include points such as an entrance to a parking lot, which could be deviation expected.
6. As to Applicant's arguments concerning storing precalculations on memory, Ito does store precalculations in memory at a remote server instead of on the navigation device within the vehicle as pointed out in last rejection.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS KISWANTO whose telephone number is (571)270-3269. The examiner can normally be reached on Monday - Friday, 9AM - 6PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Kiswanto/
Examiner, Art Unit 3664
/KHOI TRAN/
Supervisory Patent Examiner, Art Unit 3664